

I CLAIM:

1. Circulator pump-motor unit with a spherical magnetic gap between a stator and a spherical armature, said armature being supported by a ball in the center and a bearing cap so that it can wobble within a predetermined angular interval, said armature forming a unit with an impeller having an inlet opening which faces a spherical stationary wall within a distance of working clearance whereby said stationary wall has two inlet openings laying side by side divided by a wall portion, each of said openings is connected through a channel with an inlet port and whereby said impeller can be tilted into a first position, so that said inlet opening of said impeller faces only one of said two openings while a ring portion being part of said impeller with a spherical outer surface covers the remaining opening so that fluid entering the first inlet port will be conveyed through the circulator pump while said ring portion covers the second opening and that the armature-impeller-unit can be tilted into a second position covering said first opening and conveying fluid from the second opening and the second inlet port through the circulator pump.
2. Circulator pump-motor unit according to claim 1, further comprising a pump housing with an inlet region with two crescent-shaped inlet openings (20, 21) separated by a lenticular-shaped dividing wall (23).
3. Circulator pump-motor unit according to claim 2, further comprising a spherical ring (11) at the entrance region of the pump impeller (10'), whereby the ring (11) closes one of the crescent-shaped openings (20, 21).
4. Circulator pump-motor unit according to claim 1, wherein a permanent magnet ring (5) moves the rotor (1) into an oblique position when the stationary electric magnet (6) is activated.
5. Circulator pump-motor unit according to claim 4, wherein the oblique position of the rotor is caused by a DC current-surge through an asymmetric DC-coil (3*) that moves the rotor-impeller-unit (1", 10'") between said first position and said second position.
6. A circulator pump-motor unit, comprising:

an impeller assembly adapted to selectively tilt between a first position

and a second position, said impeller assembly having a suction port;

wherein said suction port is aligned with a first inlet while a second inlet is blocked when said impeller assembly is in said first position; and

wherein said suction port is aligned with said second inlet while said first inlet is blocked when said impeller assembly is in said second position.

7. The circulator pump-motor unit according to claim 6, further comprising:

electromagnets adapted to actuate tilting of said impeller assembly.

8. The circulator pump-motor unit according to claim 6, wherein said first inlet and said second inlet are crescent-shaped and are separated by a lenticular-shaped dividing wall.